

Atty Dkt. No.: LFE-015
USSN: 09/844,929AMENDMENTSIn the claims:

Please cancel claims 1, 5 and 6, amend claims 2-4, 8-9, 11, 13-17, 21, 24 and 27, and add new claims 28-38.

Please cancel claim 1.

2. (Currently Amended) The electrochemical test strip according to Claim ~~25~~¹ 1, wherein said test strip comprises from 2 to 25 reaction zones.

3. (Currently Amended) The electrochemical test strip according to Claim ~~26~~¹ 1, wherein each of said reaction zones houses the same reagent composition.

C 1
4. (Currently Amended) The electrochemical test strip according to Claim ~~28~~¹ 1, wherein at least two of said reaction zones house different reagent compositions.

Please cancel claim 5.

Please cancel claim 6.

7. Previously Cancelled

~~12~~¹² 8. (Currently Amended) The electrochemical test strip according to Claim ~~27~~¹¹ 1, wherein said redox reagent system comprises at least one enzyme and a mediator.

~~13~~¹³ 9. (Original) The electrochemical test strip according to Claim ~~8~~¹² 8, wherein said at least one enzyme includes an oxidizing enzyme.

~~14~~¹⁴ 10. (Original) The electrochemical test strip according to Claim ~~9~~¹³ 9, wherein said oxidizing

Atty Dkt. No.: LIFE-015
USSN: 09/844,929

enzyme in a glucose oxidizing enzyme.

5¹ 11. (Currently Amended) The electrochemical test strip according to Claim ~~28~~¹ 4, wherein at least one of said electrodes comprises a material selected from the group consisting of: gold, palladium, silver, iridium, carbon, platinum, nichrome, doped indium tin oxide and stainless steel.

6² 12. (Original) The electrochemical test strip according to Claim ~~5~~¹ 1, wherein said electrode comprises gold or palladium.

7³ 13. (Currently Amended) The electrochemical test strip according to Claim ~~28~~¹ 4, wherein each of said reaction zones has a volume ranging from about 0.1 to 10 μ l.

C¹
Cont'd 8⁴ 14. (Currently Amended) The electrochemical test strip according to Claim ~~28~~¹ 4, wherein said reference electrode is a gold electrode.

9⁵ 15. (Currently Amended) The electrochemical test strip according to Claim ~~28~~¹ 4, wherein said working electrode is a palladium electrode.

10⁶ 16. (Currently Amended) The electrochemical test strip according to Claim ~~28~~¹ 4, wherein said strip is present in a meter.

15⁷ 17. (Currently Amended) A method of determining the concentration of an analyte in a physiological sample, said method comprising:

(a) applying said physiological sample to an electrochemical test strip comprising a plurality of reaction zones defined by opposing working and reference electrodes separated by a spacer layer and a reagent composition present in each of said reaction zones, wherein each of said reactions zones are provided by a bore through said spacer layer and further wherein each of said reaction zones has its own fluid ingress channel to provide for fluid communication between said reaction zones and the external environment of said test strip;

(b) detecting an electrical signal in said reaction zone using said opposing electrodes;
and

Atty Dkt. No.: LFFB-015
USSN: 09/344,929

(b) relating said detected electrical signal to the amount of said analyte in said sample.

¹⁶
~~18.~~ (Original) The method according to Claim ¹⁵~~17~~, wherein said analyte is glucose.

¹⁷
~~19.~~ (Original) The method according to Claim ¹⁶~~18~~, wherein said redox reagent system comprises a glucose oxidizing enzyme.

¹⁸
¹⁹
~~20.~~ (Original) The method according to Claim ¹⁵~~17~~, wherein said method comprises employing a meter.

C1
Contd
¹⁹
~~21.~~ (Currently Amended) A kit for use in determining the concentration of an analyte in a physiological sample, said kit comprising:

(a) an electrochemical test strip comprising a plurality of reaction zones defined by opposing working and reference electrodes separated by a spacer layer and a reagent composition present in each of said reaction zones, wherein each of said reaction zones are provided by a bore through said spacer layer and further wherein each of said reaction zones has its own fluid ingress channel to provide for fluid communication between said reaction zones and the external environment of said test strip; and

(b) at least one of:

- (i) a means for obtaining said physiological sample; and
- (ii) an analyte standard.

²⁰
~~22.~~ (Previously Amended) The kit according to Claim ¹⁹~~21~~, wherein said means for obtaining said physiological sample is a lancet.

²¹
~~23.~~ (Previously Amended) The kit according to Claim ¹⁹~~21~~, wherein said kit further comprises a meter.

²²
~~24.~~ (Currently Amended) A system for use in determining the concentration of an analyte in a physiological sample, said system comprising:

Atty Dkt. No.: LHP-015
USPN: 09/844,929

(a) an electrochemical test strip comprising a plurality of reaction zones defined by opposing working and reference electrodes separated by a spacer layer and a reagent composition present in each of said reaction zones, wherein each of said reaction zones are provided by a bore through said spacer layer and further wherein each of said reaction zones has its own fluid ingress channel to provide for fluid communication between said reaction zones and the external environment of said test strip; and

(b) a meter.

²³
~~25.~~ (Previously Amended) The system according to Claim ²²~~24~~, wherein said system further comprises a means for obtaining said physiological sample.

²⁴
~~26.~~ (Previously Amended) The system according to Claim ²²~~24~~, wherein said system further comprises an analyte standard.

¹¹
~~27.~~ (Previously Reinstated) The electrochemical test strip according to claim ¹~~24~~, wherein at least one of said reagent compositions is a redox reagent system.

¹
~~28.~~ (Newly Added) An electrochemical test strip comprising:
(a) a plurality of reaction zones defined by opposing working and reference electrodes separated by a spacer layer, wherein each of said reaction zones is defined by a bore through said spacer layer and further wherein each of said reaction zones has its own fluid ingress channel to provide for fluid communication between said reaction zones and the external environment of said test strip; and

(b) a reagent composition present in each of said reaction zones .

²⁵
~~29.~~ (Newly Added) An electrochemical test strip comprising:
(a) a plurality of reaction zones defined by opposing working and reference electrodes separated by a spacer layer, wherein each of said reaction zones is defined by a bore through said spacer layer and further wherein at least two of said reaction zones have fluid ingress channels that

Atty Dkt. No.: LIFE-015
USSN: 09/844,929

merge to produce a single ingress channel to provide for fluid communication between said reaction zones and the external environment of said test strip; and

(b) a reagent composition present in each of said reaction zones .

²⁶
~~30.~~ (Newly Added) The electrochemical test strip according to Claim ²⁵~~29~~, wherein said test strip comprises from 2 to 25 reaction zones.

²⁷
~~31.~~ (Newly Added) The electrochemical test strip according to Claim ²⁵~~29~~, wherein each of said reaction zones houses the same reagent composition.

²⁸
~~32.~~ (Newly Added) The electrochemical test strip according to Claim ²⁵~~29~~, wherein at least two of said reaction zones house different reagent compositions.

²⁹
~~33.~~ (Newly Added) The electrochemical test strip according to claim ²⁵~~29~~, wherein at least one of said reagent compositions is a redox reagent system.

³⁰
~~34.~~ (Newly Added) The electrochemical test strip according to Claim ²⁹~~33~~, wherein said at least one enzyme includes an oxidizing enzyme.

³¹
~~35.~~ (Newly Added) The electrochemical test strip according to Claim ³⁰~~34~~, wherein said oxidizing enzyme ^{is} ~~is~~ a glucose oxidizing enzyme.

³²
~~36.~~ (Newly Added) A method of determining the concentration of an analyte in a physiological sample, said method comprising:

(a) applying said physiological sample to an electrochemical test strip comprising a plurality of reaction zones defined by opposing working and reference electrodes separated by a spacer layer and a reagent composition present in each of said reaction zones, wherein each of said reactions zones are provided by a bore through said spacer layer and further wherein at least two of said reaction zones have fluid ingress channels that merge to produce a single ingress channel to provide for fluid communication between said reaction zones and the external environment of said

Atty Dkt. No.: LIFE-015
USSN: 09/844,929

test strip;

(b) detecting an electrical signal in said reaction zone using said opposing electrodes;

and

(c) relating said detected electrical signal to the amount of said analyte in said sample.

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37.

(Newly Added) A kit for use in determining the concentration of an analyte in a physiological sample, said kit comprising:

(a) an electrochemical test strip comprising a plurality of reaction zones defined by opposing working and reference electrodes separated by a spacer layer and a reagent composition present in each of said reaction zones, wherein each of said reaction zones are provided by a bore through said spacer layer and further wherein at least two of said reaction zones have fluid ingress channels that merge to produce a single ingress channel to provide for fluid communication between said reaction zones and the external environment of said test strip; and

(b) at least one of:

(i) a means for obtaining said physiological sample; and

(ii) an analyte standard.

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38.

(Newly Added) A system for use in determining the concentration of an analyte in a physiological sample, said system comprising:

(a) an electrochemical test strip comprising a plurality of reaction zones defined by opposing working and reference electrodes separated by a spacer layer and a reagent composition present in each of said reaction zones, wherein each of said reaction zones are provided by a bore through said spacer layer and further wherein at least two of said reaction zones have fluid ingress channels that merge to produce a single ingress channel to provide for fluid communication between said reaction zones and the external environment of said test strip; and

(b) a meter.